

REMARKS

Reconsideration of the final rejection of claims 24 and 25 is respectfully requested.

Claims 24 and 25 have been extensively amended in accordance with the teaching of Applicant's specification and drawings to clearly distinguish over Elliott, the single reference relied upon for the final rejection under 35 USC 102. As amended, independent claim 24 and dependent claim 25 more clearly define Applicant's ground piercing tool as comprising a ground piercing tip, an end cap and a rod secured by mating forward and rearward facing threaded portions to the tip and end cap and including engaging radially extending shoulders that transfer axial impact forces from a rearward facing impact surface of the cap to the tip to relieve axial forces on the threaded connections between the cap and rod and rod and tip.

Applicant acknowledges that Elliott teaches a ground piercing device for providing a pipe-receiving bore 24. As set forth at page 1, column 2, line 43 through page 2, column 1, line 6 of Elliott, that device comprises a boring head 25, a push rod 26 and a push block 27. However, Applicant most strongly asserts that the boring head, push rod and push block combination of Elliott does not teach axial force transferring radially extending engaging shoulders between the push block 27 and push rod 26 and between the push rod 26 and the boring head 25 as defined by Applicant's amended claims 24 and 25. Absent

such teachings, Applicant submits that Elliott is not a proper reference for rejection of amended claims 24 or 25 under 35 USC 102.

As to the final rejection, it appears to disregard the necessary push rod 26 and push 27 portions of the Elliott device and to be based entirely upon an analysis of Elliott's boring head 25. In that regard, the boring head 25 as illustrated in Figs 4-10 and described at page 2, column 1, line 70 through page 2, column 2 line 75 comprises three separate elements, namely a tapered nose 34, a spiral threaded intermediate section 35 and a rear section 36. A set screw 39 releasably locks the intermediate section 35 to the nose 34 while spiral threads 37 on the intermediate section 35 cause the nose 34 and section 35 to rotate together as the boring head 25 is driven through the earth. Further, as described by Elliott, a swivel connection including a set screw 48 is provided between the head sections 35 and 36. In each of these regards, Applicant's single piece tip distinguishes from the three piece boring head of Elliott (Applicant's claim 24 defining the tip as "consisting" of forward facing point, a rearward facing threaded portion and a radially extending shoulder).

Moreover, Applicant submits (i) that intermediate section 35 of the Elliott boring head 25 is not a rod as defined by amended claims 24 and 25 including radially extending forward

and rearward facing shoulders and (ii) that rear section 36 of the Elliott boring head 25 is not an end cap having a rearward facing axial impact surface and a radially extending forwardly facing shoulder as defined by amended claims 24 and 25.

Accordingly, Applicant submits that the teachings of Elliott do not in any respect anticipate amended claims 24 and 25 under 35 USC 102, that the final rejection of such claims should be withdrawn and the subject application be passed to issue.

Respectively submitted,



ROBERT R. MEADS

Attorney for Applicant  
Registration No. 22,796  
(310) 373-7621